

REMARKS

Claims 1 and 3-16 are pending in the application. Claims 1, 3-6, 8-10, 12-14 and 16 are allowed. Claims 7, 11 and 15 are rejected. Claim 7 is hereby amended.

Claims 7, 11 and 15 are rejected under 35 USC § 102 as anticipated by US 6,448,752, Umemoto.

Applicant respectfully submits that claim 7, at least as amended, is not anticipated by Umemoto and is allowable. Claim 7, as amended, requires “charging means responsive to an input signal for supplying positive and negative charging current to said capacitor means so as to define rising and falling edges of said switched signal”. As the Examiner points out, Umemoto discloses a current producing circuit 4 that produces a charging current, i.e. increasing or decreasing.

Claim 7 as amended also requires generating “a feedback current and said charging current with continuous magnitudes that are progressive functions of said capacitor voltage so that the rate of change of said capacitor voltage is a continuous function of time.” It is clear that the current producing circuit 4 of Umemoto produces a “triangular wave” voltage at node 131, by producing a capacitor voltage C_a whose rate of change is not a continuous function of time as required by present claim 7 but is a discontinuous function of time, the rate of change dV/dt of the capacitor voltage being alternately $+I/C_a$ and $-I/C_a$.

In this respect, the passage at col. 6 lines 7-19 of Umemoto reads (emphasis added): “When the transistor **Q6** is in OFF state, the transistor **Q7** is turned OFF and the current of value I in the up-stream transistor **Q5** flows into the capacitor C_a to charge the same with charging current of value I . On the other hand, when the **Q** output is “L”, the transistor **Q8** is turned OFF and the transistor **Q6** is turned ON, when the transistor **Q6** is in ON state, since the transistor **Q7** can cause to flow current of value $2I$, current of value I from the up-stream transistor **Q5** and discharge current of value I from the capacitor C_a flow out. Thereby, the discharging of the current of value I is effected.”

The absence of discontinuities in the rate of change of the switched signal in accordance with the invention of present claim 7 avoids generating harmonics of the

basic frequency and avoids issues of electromagnetic compatibility that are not avoided nor foreshadowed by Umemoto. Accordingly it is submitted that claim 7 is not anticipated nor rendered obvious by Umemoto. Claim 7 is therefore submitted to be allowable.

Claims 11 and 15 depend on claim 7 and are submitted to be allowable at least for this reason. In addition, claim 11 requires "said capacitor voltage varies substantially as a sinusoidal half-cycle having a single frequency to define said edge of said switched signal". Umemoto teaches that the capacitor voltage should vary as a triangular wave, which inherently has harmonics of the basic frequency and Applicant respectfully submits that this points away from the invention of claim 11.

Although Applicants may disagree with statements made by the Examiner in reference to the claims and the cited references, Applicants are not discussing all these statements in the current Office Action since reasons for the patentability of each pending claim are provided without addressing these statements. Therefore, Applicants reserve the right to address these statements at a later time if necessary.

No amendment made herein is related to the statutory requirements of patentability unless expressly stated herein. Further, no amendment herein is made for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 503079, Freescale Semiconductor, Inc.

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Respectfully submitted,

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